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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,827

05/22/2006

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EXAMINER

DINH, TIEN QUANG

ART UNIT

PAPER NUMBER

3644

NOTIFICATION DATE

DELIVERY MODE

09/30/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,827	<b>Applicant(s)</b> HUBER ET AL.	
	<b>Examiner</b> Tien Dinh	<b>Art Unit</b> 3644	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 26 rejected under 35 U.S.C. 102(b) as being anticipated by Bergholz 4479621.

Bergholz discloses an aircraft having a cylindrical fuselage, prefabricated cargo floor module having at least one floor element 13, a functional unit 34, and floor beam supporting the floor element (see figure 4) that adapted for connection to a skin of said aircraft with parts shown in figure 4. The prefabricated cargo floor module can rest on the cylindrical fuselage without the floor module being connected to the fuselage. This occurs when the floor module can be angled with one end resting on the very bottom of the fuselage while the other end touches the side portion of the inner fuselage. Please note that the desired finished position is when the floor module is mounted and connected to the fuselage with parts 20, 21. However, when the floor module is inside the fuselage, it doesn't have to be connected to the fuselage with parts 20, 21. This meets what has been claimed. Plus, the last paragraph of claim 26 is alternatively interpreted. The floor module can rests within the fuselage without the floor module being connected to the fuselage with parts 20 since the parts 15 support the floor module prior to the parts 20 are used to connect the floor module to the side of the fuselage.

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Concerning amended claim 26, the limitation of “for a lower cargo deck of the aircraft” is intended use and carries no patentable weight. Plus, Bergholz's floor module can be used to define a lower cargo deck.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergholz 4479621 in view of Huber 6517028

Bergholz discloses an aircraft having a cylindrical fuselage, prefabricated cargo floor module having at least one floor element 13, a functional unit 34, and floor beam supporting the floor element (see figure 4) that adapted for connection to a skin of said aircraft with parts shown in figure 4. The prefabricated cargo floor module can rest on the cylindrical fuselage without the floor module being connected to the fuselage. This occurs when the floor module can be angled with one end resting on the very bottom of the fuselage while the other end touches the side portion of the inner fuselage. Please note that the desired finished position is when the floor module is mounted and connected to the fuselage with parts 20, 21. However, when the floor module is inside the fuselage, it doesn't have to be connected to the fuselage with parts 20, 21. This meets what has been claimed. Plus, the last paragraph of claim 26 is alternatively interpreted. The floor module can rests within the fuselage without the floor module being

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connected to the fuselage with parts 20 since the parts 15 support the floor module prior to the parts 20 are used to connect the floor module to the side of the fuselage.

Re amendment to the claims, although Bergholz is silent concerning the floor module being used to form a “lower” cargo deck floor, Huber clearly shows that floor modules used to form a lower cargo deck is notoriously well known. Huber also shows upper and lower compartment/decks are well known. See figures 2-5.

It would have been obvious to one skilled in the art at the time the invention was made to have made Bergholz’s aircraft have upper and lower decks and floor module forming a lower cargo deck as taught by Baldwin so as to have a lower cargo deck to accommodate payloads at the lower portion of the fuselage.

Claims 1-3, 13, 14-15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin 3612316 in view of Micale 5806797 and/or Powell 20040237439.

Baldwin discloses a floor (at the bottom portion of the aircraft) for a cargo compartment of an aircraft having at least one floor elements 18, 14 and functional units 28, 40, 34, 108, which are connected to floor element to carry such units (see figure 2), and floor beam 12 supporting the floor element and adapted to the skin of the aircraft. The floor elements 18, 14 are connected to the floor beam. Baldwin is silent on the prefabricated floor modules. However, Micale discloses that to prefabricate an aircraft structure is well known. The prefabricated structures are then used to build the fuselage. See figure 16. In addition, Powell discloses that to prefabricate a structure is well known.

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It would have been obvious to one skilled in the art at the time the invention was made to have made prefabricated floor modules in Baldwin's system as taught by Micale and/or Powell so that the floor system for an aircraft can be assembled and disassembled quickly.

Re claim 3, Baldwin discloses at least one of an electrical control device and mechanical control device for controlling the functional unit is connected to the functional unit. See figure 6. See column 3, lines 21-41.

Re claim 13, people can walk on the floor panels shown in figure 1 of Baldwin.

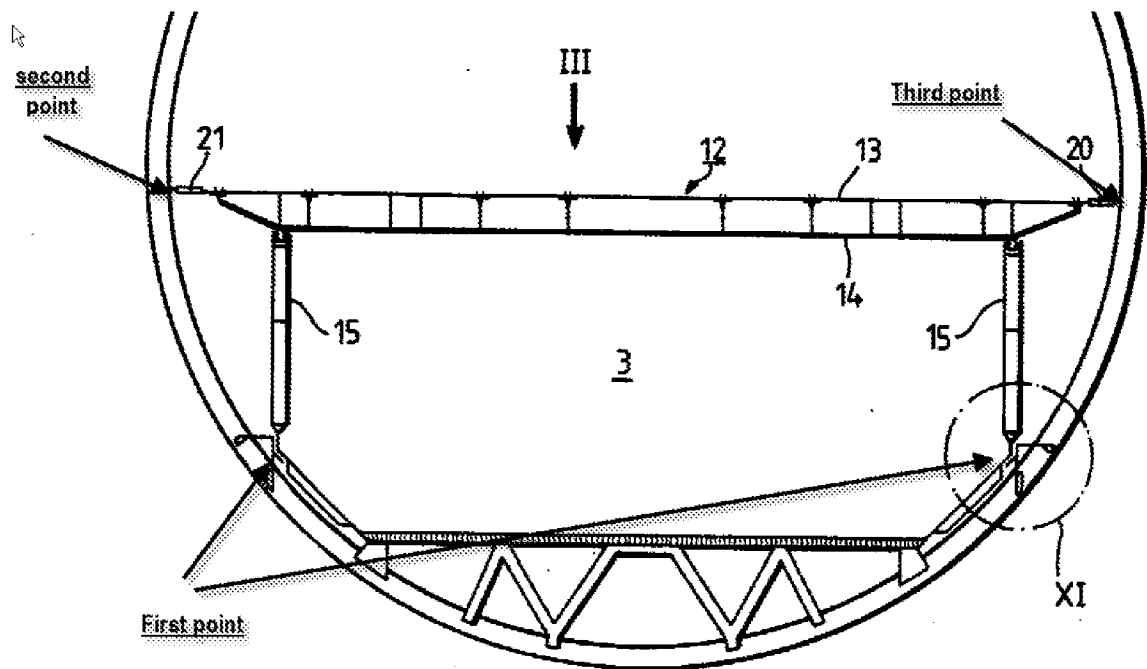
Re claims 14 and 15, the insulation devices are not numbered but are clearly shown in figure 1 of Baldwin. These devices connect the fuselage to the floor modules. There are the two vertical insulation elements connected between the fuselage and the floor modules.

Re claim 20, the examiner takes official notice that lining element and a mounting device for the lining elements are well known and that one skilled in the art would have used such elements and devices so as to protect the interior of Baldwin.

Re claim 21, the floor modules can be fastened to the skin and removed again in an arbitrary sequence as taught by the prior arts above.

It is clear that the floor is attached to the fuselage. The fuselage has a skin that is at the outer part of the aircraft. Since the floor is attached to the fuselage, it also is configured and adapted for connection to the skin of the aircraft.

Re amended claim 1, the floor beam is attached to skin at at least three different points of the floor beam.



Claims 4-7, 12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Owen 6061982.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the floor modules having channels to hold electrical leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module to form an overall conducting system when the floor modules are attached to each other. However, Owen teaches that floor modules having power cables or electrical leads/wires 20, 26 and water conduits or drainage devices 14, 15 that run across multiple floor modules and forming an overall conducting system are well known. See figure 1.

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It would have been obvious to one skilled in the art at the time the invention was made to have used floor modules and made the modules of Baldwin have the capability to carry electrical leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module as taught by Owen to have a floor module system that run the whole fuselage so that the aircraft can carry more payloads and to quickly assemble and disassemble the floor modules from the fuselage.

Re claim 4, the examiner takes official notice that transmission sockets are well known in this day and age. It would have been obvious to one skilled in the art at the time the invention was made to have use power transmission sockets in Baldwin's system so that the transmission of power can run across the floor modules for easier assembly and disassembly.

Re claims 6 and 7, the branches are shown in figure 1 of Owen. See parts 20, 26. Re claim 7, see parts 70 and 72, which are the mechanical connections. See figure 6 of Owen. It would have been obvious to one skilled in the art at the time the invention was made to have used braches and mechanical connections in Baldwin's system as taught by Owen to allow floor modules to be connected mechanically and electrically.

Re claim 18, Owen discloses floor modules having a connecting device (which is the outer covering of the wires 20 shown in figure 1) for electronic components. The fixation device can be parts 18 or 42, 50.

Re claim 19, Baldwin is silent on the water tanks and the connecting devices. Please note that Owen teaches water tanks 86 and a connecting device 14, 15 are well known. It would have been obvious to one skilled in the art to have used water tanks and/or connecting devices 14 in Baldwin's system as taught by Owen to move liquid through the floor modules.



Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Telair International DE19712278.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the inspection openings with floor element section and the fast action closure device. However, Telair discloses that inspection openings with floor element sections 42 and fast action closure devices (not numbered but is next to number 59 in figure 1) are well known. The bilge space is disclosed by Baldwin.

It would have been obvious to one skilled in the art at the time the invention was made to have used inspection openings with fast action closure devices in Baldwin's system as taught by Telair to allow easy access through the floor modules for safety inspections.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Tovani 5827022.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the sealing device or leakproof connecting elements. However, Tovani discloses that sealing devices are well known. See figure 1 and where number 22 is pointed to.

It would have been obvious to one skilled in the art at the time the invention was made to have used sealing devices Baldwin's system as taught by Tovani to have a tighter seal over and below the floor elements and between floor elements.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Micale and/or Powell as applied to claim 1 above, and further in view of Nordstrom 7410128.

Baldwin as modified by Micale and/or Powell discloses all claimed parts except for the bulkheads and fixation devices. However, Nordstrom discloses that Bulkheads 48 with fixation devices are well known. See figure 2.

It would have been obvious to one skilled in the art at the time the invention was made to have used bulkheads and fixation devices in Baldwin's system as taught by Nordstrom as separation barriers for better organization. Please note that the bulkhead has ballistic resistant materials since it can resist ballistic parts.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergholz 4479621 in view of Owen 6061982 and Huber 6517028.

Bergholz discloses all claimed parts (see the rejection) except for the floor module having a water tank and the lower cargo deck/compartment. Huber clearly shows that floor modules used to form a lower cargo deck is notoriously well known. Huber also shows an upper and lower deck/compartment. See figures 2-5.

It would have been obvious to one skilled in the art at the time the invention was made to have made Bergholz's aircraft have upper and lower decks/compartment and floor module forming a lower cargo deck as taught by Baldwin so as to have a lower cargo deck to accommodate payloads at the lower portion of the fuselage.

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In addition, Owen teaches that floor modules water conduits or drainage devices 14, 15 (which are water tanks) that run across multiple floor modules and forming an overall conducting system are well known. See figure 1.

It would have been obvious to one skilled in the art at the time the invention was made to have used water tanks in Bergholz as taught by Owen to accommodate the passengers' need.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-21 and 26-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 12-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Collins can be reached on 571-272-6886. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tien Dinh/  
Primary Examiner, Art Unit 3644